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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/918,961

07/31/2001

Aaron Valdivia

PD-200257

2564

7590

08/17/2006

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Patent Docket Administration
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EXAMINER

HAQ, MOHAMMAD AAMIR

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,961

Applicant(s)

VALDIVIA ET AL.

Examiner

Aamir Haq

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 10, 15 - 20 and 27 - 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 10, 15 - 20 and 27 - 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment filed 4/11/2006. Claims 1 – 10, 15 – 20 and 27 – 29 are now pending in the present application. **This action is made final.**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 6, 8 – 10, 15 – 20 and 27 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,366,761 (Montpetit) in view of US 2002/0009060 (Gross).

As to claims 1, 9, 15, 27, 28, Montpetit discloses a system for providing automated distributed provisioning satellite resources in a satellite communication network comprising:

- at least one satellite (see figure 10 of Montpetit), said satellite comprising a plurality of antenna elements for receiving transmissions (satellites inherently contain antennas for transmitting and/or receiving signals) from geographically distinct cells (see figures 1 and 2 of Montpetit), a plurality of demodulators each adapted to demodulate signals in a particular frequency band (65, 69 and 89 in fig. 10 of Montpetit), a switch matrix for connecting said antenna elements to said demodulators (67 in fig. 10 of Montpetit), and a payload processor for configuring

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said switch matrix to configure said satellite requires as a payload configuration (81, 83 and 85 in fig. 10 of Montpetit), wherein said resources comprise a plurality of channels for transmitting information to or from said satellite.

- a satellite resource allocation plan, comprising information related to the payload configuration over time and an allocation of satellite capacity pools amongst a plurality of remote network operators at geographically distributed locations (col. 2 line 53 – col. 3 line 23 of Montpetit)
- determine whether said capacity allocation plan can be fulfilled based on a plurality of system constraints including the satellite resource allocation plan (fig. 9 and col. 11 lines 4 – 27 of Montpetit) to update the satellite resource allocation plan based on results of the determination and to send commands to said payload processor in order to modify the payload configuration to satisfy the capacity allocation plan (fig. 9 and col. 11 lines 4 – 27 of Montpetit). Note that it is inherent that if a new bandwidth plan is allocated (in response to a request) the “payload” will be reconfigured to adapt to the new bandwidth parameters.

Silent on:

- a capacity management unit having a plurality of network interfaces accessible by the remote network operators, wherein the capacity management unit is adapted to automatically receive a capacity allocation plan from any one of the remote network operators requesting a capacity allocation within one or more capacity pools allocated to said one network operator.

However, Gross discloses:

- a capacity management unit having a plurality of network interfaces accessible by the remote network operators, wherein the capacity management unit is adapted to automatically receive a capacity allocation plan from any one of the remote network operators requesting a capacity allocation within one or more capacity pools allocated to said one network operator (§0042 of Gross)

Montpetit and Gross are analogous art because they are from the same field of endeavor, namely Bandwidth on demand in satellite systems. At the time of the invention it would have been obvious to a person of ordinary skill in the art to receive capacity allocation requests from remote operators that are accessible to network interfaces in the system of Montpetit in view of the teachings of Gross. The motivation for doing so would have been because the remote operators require additional bandwidth to meet their needs and therefore need to be able to convey this requirement to the satellite system (§0042 of Gross). Montpetit teaches the need for user's to be able to request bandwidth on-demand (col. 2 lines 41 – 55 of Montpetit) and therefore contemplated the necessity of providing users with a method to request bandwidth proportional to their current or anticipated needs.

As to claims 2, 3, and 8, the “Internet link” disclosed by Gross (§0042 of Gross) reads on the claimed local and wide area network.

As to claims 4 – 6, 10 and 16 – 20, Examiner takes official notice that it would have been obvious to one of ordinary skill in the art at the time of the invention that the provisioning or bandwidth on-demand of satellite resources is directly correlated to physical satellite constraints (i.e. number of antennas, demodulators, and switches).

Obviously, a satellite can only allocate resources that are within the satellites physical limitations. Components such as antennas, switches and demodulators have maximum capabilities that cannot be exceeded. Therefore, the satellite must adhere to these limitations and not allocate resources above the components thresholds. Furthermore, the satellite must determine whether the components are capable/available to perform the required task before allocating.

3. Claims 7 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,366,761 (Montpetit) in view of US 2002/0009060 (Gross) further in view of US 6,744,737 (Arkko).

As to claims 7 and 29, Montpetit and Gross do not disclose expressly a primary network interface to allow a network engineer to access the capacity management unit and further modify the satellite resource allocation plan and the payload configuration. However, Arkko teaches an arrangement in which a user can to log into a remote node, via a user interface, and subsequently modify or manage features associated with the communications network (Abstract, col. 4 lines 32 – 51 and col. 9 lines 24 – 39). Montpetit, Gross and Arkko are analogous art because they are form the same field of endeavor, namely communications. At the time of the invention it would have been obvious to modify the satellite resources in the system of Montpetit by accessing the capacity management unit via a network interface in view of the teachings of Arkko. The motivation for doing so would have been to provide an efficient manual way for a user to be able to request bandwidth in advance. Both Montpetit and Gross teach the

idea of receiving bandwidth on demand. The bandwidth is allocated based on requirements and resources available. If a user were to desire additional bandwidth for a future time period, it would be beneficial if the user could manually access an interface that enabled the user to request bandwidth in advance. Arkko teaches this capability of being able to access a user interface in order to manage services/settings. In view of these teachings, it would be obvious to one of ordinary skill in the art to combine Arkko with Montpetit and Gross to obtain a bandwidth-on demand system that enabled a user to request resources in advance via a user interface.

In addition, the interface provides a method for modifying or fixing problems. For example, the satellite may have allocated a portion of resources incorrectly, thereby causing a problem that requires attention or modification. A user interface provides a method to access the system and reconfigure these settings to alleviate the given error.

Lastly, it is old and well known in many arts to be able to access systems from remote locations to reconfigure or modify settings. For example, it is known to control settings in a house/office from remote locations. In this example, users can access a website and configure appliances like lights, appliances, air conditioning, alarm modes etc. In other words, the idea of modifying settings through a user interface from a remote location is old and well known. In addition, the idea of receiving bandwidth on-demand when requested is old and well known. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be able to modify the settings of the bandwidth on demand system via a remote user interface.

Response to Arguments

4. Applicant's arguments with respect to claim Claims 1 – 10, 15 – 20 and 27 – 29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 4,256,925 (Goode) discloses a capacity reallocation method for satellite systems. US 2004/0203746 (Macridis et al.) discloses a bandwidth allocation method and apparatus. US 6,731,616 (Berrada et al.) teaches a reservation requesting allocation method for satellites. US 2004/0136334 (Heiman et al.) teaches a satellite communication system.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aamir Haq whose telephone number is 571-272-5511. The examiner can normally be reached on Mon thru Fri 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A.H.

A.H.
August 15, 2006


WING CHAN
SUPERVISORY PATENT EXAMINER